

# **STIC Search Report**

## **EIC 2800**

**STIC Database Tracking Number: 130565**

**TO: Anthony Green  
Location: REM-9C15  
August 26, 2004  
AU 1755  
Case Serial No. : 10/657,485**

**From: Jeff Harrison  
Location: STIC-EIC2800  
JEF-4B68  
Phone: 22511**

**Email: harrison, jeff**

### **Search Notes**

**Examiner Green,**

**Re: Monoazo Dye**

**Attached are search results, mostly from CAS/Chemical Abstracts.**

**I yellow-tagged what seems to be the closest art found.**

**It is the CAS Registry data record for the sought structure. CAS input this record into the publicly-available CAS Registry database on 12/13/1999. Strangely, I find no STN abstract indexed to the CAS Registry number, 250639-69-1, for this structure. Note that this CAS Registry number, 250639-69-1, is listed in the 10/657,485 IDS.**

**The orange-tagged 1957 abstract shows this sought structure, minus the strontium, used with Ba, Ca, and Mg ions, which seem analogous to Sr.**

**Based on this, if you have questions or comments, or if you would like refocused searching, please let me know.**

**Thanks,**

**Jeff Harrison, Team Leader, STIC-EIC2800, JEF-4B68, 571-272-2511**



# STIC Search Results Feedback Form

## EIC 2800

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

Jeff Harrison, EIC 2800 Team Leader  
571-272-2511, JEF 4B68

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 2810

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2800, CP4-9C18



## FILE 'HCAPLUS' ENTERED AT 08:46:48 ON 26 AUG 2004

L1 59 S BINDRA A?/AU, IN  
 L2 4 S L1 AND (MONOAZO##### OR MONO AZO####)  
 L3 SEL PLU=ON L2 1- RN : 50 TERMS

## FILE 'REGISTRY' ENTERED AT 08:47:26 ON 26 AUG 2004

L4 50 S L3  
 L5 2 S L4 AND 4/NR  
 L6 14 S L4 AND SR/ELS  
 L7 0 S SR/ELS AND 4/NR AND MONOAZO##### AND S/ELS AND O/ELS AND (OL OR HYDROX##### OR ALCOHOL)  
 L8 0 S 4/NR AND MONOAZO##### AND S/ELS AND O/ELS AND (OL OR HYDROX##### OR ALCOHOL)  
 L9 0 S 2/NR AND MONOAZO##### AND S/ELS AND O/ELS AND (OL OR HYDROX##### OR ALCOHOL)  
 L10 0 S 2/NR AND MONOAZO##### AND S/ELS AND  
 O/ELS AND SR/ELS  
 L11 19 S 4/NR AND AZO##### AND S/ELS AND O/ELS AND SR/ELS  
 L12 2 S 2/NR AND AZO##### AND S/ELS AND O/ELS AND SR/ELS  
 L13 18 S (L11 OR L12) AND (OL OR HYDROX##### OR ALCOHOL)  
 L14 10 S L13 AND (SULFATE OR SULFON#####)  
 L15 10 S L14 NOT L5  
 L16 92533 S 591.49.57/RID AND AZO  
 L17 50553 S L16 AND SULFON#####  
 L18 42673 S L17 AND (HYDROX##### OR OL OR ALCOHOL)  
 L19 40 S L18 AND SR/ELS  
 L20 20 S L4 AND 591.49.57/RID  
 L21 12 S L6 AND L20  
 L22 66 S ((L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15) OR  
 (L19 OR L20 OR L21))  
 L23 3 S L22 AND (RED OR MAGENTA)  
 L24 1 S 250639-69-1/RN, CRN  
 L25 10 S 21416-46-6/RN, CRN  
 L26 1 S 21416-46-6/RN  
 L27 1 S 21416-46-6/CRN AND SR/ELS  
 L28 1 S L27 NOT L15  
 L29 0 S L27 NOT L23  
 L30 121 S SR/MF

## FILE 'REGISTRY' ENTERED AT 09:04:09 ON 26 AUG 2004

L34 1 S 21416-46-6/RN

## FILE 'HCAPLUS' ENTERED AT 09:04:09 ON 26 AUG 2004

L35 26 S L34  
 L36 0 S L34 (L) (SR OR STRONTIUM)  
 L37 1 S L34 AND (SR OR STRONTIUM OR L30)

## FILE 'REGISTRY' ENTERED AT 09:12:47 ON 26 AUG 2004

L38 1 S 29128-55-0  
 L39 1 S 6371-67-1/RN

## FILE 'HCAPLUS' ENTERED AT 09:15:15 ON 26 AUG 2004

L40 9 S L39

## FILE 'REGISTRY' ENTERED AT 09:15:16 ON 26 AUG 2004

L41 1 S 250639-69-1/RN  
 L42 0 S L41  
 L43 9 S L42 OR L40

## FILE 'REGISTRY' ENTERED AT 09:15:16 ON 26 AUG 2004

L44 1 S 29128-55-0/RN

## FILE 'HCAPLUS' ENTERED AT 09:15:17 ON 26 AUG 2004

L45 20 S L44

## FILE 'REGISTRY' ENTERED AT 09:20:06 ON 26 AUG 2004

L46 1 S 111797-52-5  
 L47 3 S 111797-52-5/CRN

## FILE 'HCAPLUS' ENTERED AT 09:23:42 ON 26 AUG 2004

L48 30 S L40 OR L43 OR L45 OR (L46 OR L47)  
 L49 5 S L48 AND (L30 OR SR OR STRONT#####)  
 L50 2005 S (RED OR MAGENTA) (5A) (11779 OR 13 OR 49 OR 208)  
 L51 1 S (L46 OR L47)  
 L52 6 S L49 OR L51  
 L53 23 S L50 AND (SR OR STRONT##### OR L30)  
 L54 23 S L53 NOT L52

## FILE 'HCAPLUS, WPIX, JAPIO, INSPEC, ANABSTR, PIRA, RAPRA' ENTERED AT 11:11:09 ON 26 AUG 2004

L55 20000 S NAPHTHALENESULF? OR NAPHTHALENESULPH?  
 L56 7717 S L55 AND (OH OR OL OR ALCOHOL OR HYDROX#####)  
 L57 2703 S L56 AND (MONOAZO##### OR AZO#####)  
 L58 13 S L57 AND (SR OR STRONTIUM)  
 L59 SEL PLU=ON L58 1- RN IC : 206 TERMS

## FILE 'REGISTRY' ENTERED AT 11:13:50 ON 26 AUG 2004

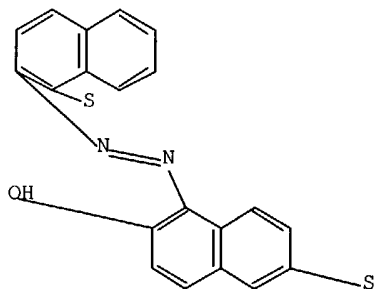
L60 192 S L59  
 L61 3 S L60 AND SR/ELS  
 L62 192 S L59  
 L63 132 S L62 AND AZO  
 L64 81 S L63 AND SULFON#####  
 L65 73 S L64 AND (HYDROX##### OR OL)  
 L66 8 S L65 AND 2/NR  
 L67 11 S L61 OR L66  
 L68 SEL PLU=ON L67 1- RN : 11 TERMS

## FILE 'HCAPLUS, WPIX, JAPIO, INSPEC, ANABSTR, PIRA, RAPRA' ENTERED AT 11:16:14 ON 26 AUG 2004

L69 59439 S L68  
 L70 4 S L58 AND L69  
 L71 13 S L58 OR L70

## FILE 'MARPAT' ENTERED AT 11:27:08 ON 26 AUG 2004

L72 STRUCTURE UPLOADED



L73 3 SEA SSS SAM L72  
 L74 48 SEA SSS FUL L72  
 L75 45 S L74 NOT L73

FILE 'ADISINSIGHT, ADISNEWS, AGRICOLA, ALFRAC, ANABSTR, AQUIRE, ASMDATA, BEILSTEIN, BIOBUSINESS, BIOSIS, BIOTECHNO, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEABA-VTB, CEN, CFR, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, COPPERDATA, CSCHEM, ...' ENTERED AT 16:15:18 ON 26 AUG 2004

L1 1 SEA ABB=ON PLU=ON 250639-69-1

FILE 'REGISTRY' ENTERED AT 16:23:18 ON 26 AUG 2004

L2 1 SEA ABB=ON PLU=ON 141025-34-5

L3 1 SEA ABB=ON PLU=ON 83249-60-9

L4 1 SEA ABB=ON PLU=ON 73019-25-7

L5 1 SEA ABB=ON PLU=ON 67990-37-8

L6 4 SEA ABB=ON PLU=ON (L2 OR L3 OR L4 OR L5)  
D FIDE 1-4

L7 3 SEA ABB=ON PLU=ON 111797-52-5/CRN

FILE 'HCAPLUS' ENTERED AT 16:24:57 ON 26 AUG 2004

L8 0 SEA ABB=ON PLU=ON L7

L9 0 SEA ABB=ON PLU=ON L7 NOT L6

L10 1 SEA ABB=ON PLU=ON L6

D ALL HITSTR

L11 SEL PLU=ON L10 1- RN : 11 TERMS

FILE 'REGISTRY' ENTERED AT 16:26:54 ON 26 AUG 2004

L12 11 SEA ABB=ON PLU=ON L11

L13 2 SEA ABB=ON PLU=ON L12 AND SR/ELS

D FIDE 1-2

FILE 'HCAPLUS' ENTERED AT 16:27:32 ON 26 AUG 2004

L14 3 SEA ABB=ON PLU=ON L13 NOT L10

# CAS Registry Database

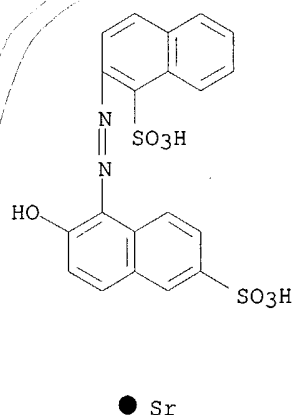
8/26/04

10/657,485

L15 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 250639-69-1 REGISTRY  
 ED Entered STN: 13 Dec 1999  
 CN 1-Naphthalenesulfonic acid, 2-[(2-hydroxy-6-sulfo-1-naphthalenyl)azo]-  
 , strontium salt (1:1) (9CI) (CA INDEX NAME)  
 MF C20 H14 N2 O7 S2 . Sr  
 SR CAS Client Services  
 CRN (111797-52-5)

## Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C6-C6	C6-C6	6-6	C10	591.49.57	2



This record was entered into the CAS Registry file by CAS Client Services department on December 13, 1999.

However, I find no journal article, patent or conference paper associated with this CAS Registry Number, 250639-69-1, in a search of CAS / STN.

STIC-EIC2800 JEF-4B68

Jeff Harrison

L51 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1958:65097 HCAPLUS

DN 52:65097

OREF 52:11648h-i

ED Entered STN: 22 Apr 2001

TI Synthetic and analytical studies on color reagents. IV. Behavior of o-sulfo-o'-hydroxy azo compounds to magnesium, calcium, and barium

AU Emi, Koichi; Toei, Kyoji; Miyata, Haruo

CS Okayama Univ.

SO Nippon Kagaku Zasshi (1957), 78, 977-8

CODEN: NPKZAZ; ISSN: 0369-5387

DT Journal

LA Unavailable

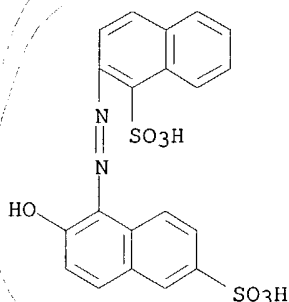
CC 7 (Analytical Chemistry)

AB Reagents were prepared by coupling a diazo component with an azo component. As the diazo component, 1-naphthylamine-2-sulfonic acid, 2-naphthylamine-1-sulfonic acid, p-toluidine-2-sulfonic acid, 5-chloro-p-toluidine-2-sulfonic acid, 4-chloro-m-toluidine-6-sulfonic acid, and 2-chloro-5-amino-4-sulfobenzoic acid were used. As the azo components, 10 derivs. of 1- and 2-naphthols were used. Color of these reagents changes at pH 11-13, and upon the addition of Mg++, Ca++, or Ba++, it changes to the acid color. Limits of detection (I) of these ions are given. I depends chiefly on the azo component, and chromotropic acid and R acid give a high sensitivity. In the above diazo components, only the sulfo group has an effect on I.

IT 111797-52-5, 2-Naphthol-6-sulfonic acid, 1-[1-sulfo-2-naphthylazo]- (in analysis for Ba, Ca and Mg)

RN 111797-52-5 HCAPLUS

CN 2-Naphthol-6-sulfonic acid, 1-(1-sulfo-2-naphthylazo)- (6CI) (CA INDEX NAME)



No Sr salt

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:257360 HCAPLUS

DN 116:257360

ED Entered STN: 27 Jun 1992

TI Preparation of mixed laked azo pigments

IN Necas, Miroslav; Plechacek, Vaclav

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CS 268606	B1	19900314	CS 1988-6215	19880919
PRAI CS 1988-6215		19880919		

AB Red pigments for printing inks, varnishes, and plastics with brilliant modified shades are prepared by coupling a mixture containing 75-99.5% diazotized 2,4,5-H<sub>2</sub>N(R<sub>1</sub>)(R<sub>2</sub>)C<sub>6</sub>H<sub>2</sub>SO<sub>3</sub>H (R<sub>1</sub>, R<sub>2</sub> = H, Cl, Me) and 0.5-25% diazotized 2,n-H<sub>2</sub>NC<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>H (n = 1, 5, 6, 7, 8) with 3,2-HOC<sub>10</sub>H<sub>6</sub>CO<sub>2</sub>H (I) and laking the zo dye with Ca, Ba, Mg, Sr, or Mn. A mixture containing 96 mol% Ca salt of 2,4-HO<sub>3</sub>S MeC<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> → I (II) and 4 mol% Ca salt of 1,2-HO<sub>3</sub>SC<sub>10</sub>H<sub>6</sub>-NH<sub>2</sub> → I was prepared in this way and had a more bluish shade than II.

ST azo pigment mixt lake

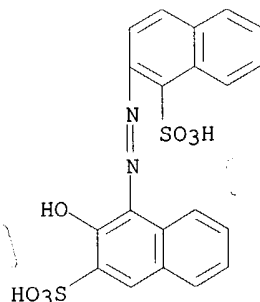
IT 141025-34-5

RL: USES (Uses)

(mixts. containing, manufacture of, as pigments)

RN 141025-34-5 HCAPLUS

CN 1-Naphthalenesulfonic acid, 2-[(2-hydroxy-3-sulfo-1-naphthalenyl)azo]-, calcium salt (1:1) (9CI) (CA INDEX NAME)



● Ca



L71 ANSWER 6 OF 13 HCAPLUS COPYRIGHT ACS on STN  
AN 1964:433099 HCAPLUS Full-text  
DN 61:33099  
OREF 61:5817g-h  
ED Entered STN: 22 Apr 2001  
TI **Azo** pigments. IV. Pigments of **azo** lakes with various metals  
AU Bansho, Yoshie; Suzuki, Shigeru; Saito, Iho  
SO Kogyo Kagaku Zasshi (1964), 67(1), 182-5  
CODEN: KGKZA7; ISSN: 0368-5462  
DT Journal  
LA Unavailable  
CC 46 (Dyes)  
GI For diagram(s), see printed CA Issue.  
AB Variation of pigment properties of **azo** lakes with various metals was studied. Thus, Orange II (C.I. 15510), Bordeaux 10B (C.I. 15880), Lithol Red (C.I. 15630), Lake Red C (C.I. 15585), Watehung Red (C.I. 15865), Carmine 33 (C.I. 16105), or Carmine 6B (C.I. 15850) were faked with Na, Mg, Ca, **Sr**, Ba, Mn, Fe, Co, Ni, or Zr salts and 69 **azo** lakes were obtained. The color of the pigments, the fastness to light, H<sub>2</sub>O, alkali, acid, **alc.**, oil, and heat were observed. The exptl. results showed that the color of the **azo**-lake pigments laked with alkaline earth metals was shifted bathochromically, but the color of the pigments laked with Mn or Group VIII metals was shifted hypsochromically. Mn-lake pigments were fast to light, and the pigments with alkaline earth metals were generally fast to H<sub>2</sub>O, alkali, **alc.**, and heat, but sensitive to acid and oil. The pigments with Group VIII metals had properties opposite to those with alkaline earth metals.  
IT Pigments  
(**azo**, metal lakes, preparation and fastness of)  
IT Spectra, visible and ultraviolet  
(of Lithol Red)  
IT Spectra, visible and ultraviolet  
(of **azo** pigment metal lakes)  
IT C.I. Acid Orange 7, barium complex  
C.I. Mordant Red 9, **strontium** complex  
C.I. Pigment Red 49, **strontium** complex  
C.I. Pigment Red 53, **strontium** complex  
C.I. Pigment Red 57, **strontium** complex  
C.I. Pigment Red 63, **strontium** complex  
IT 7440-24-6, **Strontium**  
(comps., with **azo** pigments)  
RN 7440-24-6 HCAPLUS  
CN Strontium (8CI, 9CI) (CA INDEX NAME)

Sr

L23 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN 6371-67-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1-Naphthalenesulfonic acid, 2-[(2-hydroxy-1-naphthalenyl)azo]-,  
strontium salt (2:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Pigment Red 49, strontium salt (2:1) (8CI)

OTHER NAMES:

CN 11779 Red

CN C.I. 15630:3

CN C.I. Pigment Red 49:3

CN D and C Red No. 13

CN D&C Red No. 13

CN Pigment Red 49:3

CN Red No. 208

MF C20 H14 N2 O4 S . 1/2 Sr

LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPATFULL

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Journal; Patent

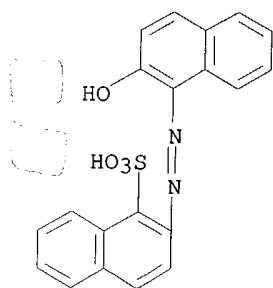
RL.P Roles from patents: BIOL (Biological study); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PRP (Properties)

CRN (29128-55-0)

#### Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C6-C6	C6-C6	6-6	C10	1591.49.57	2



● 1/2 Sr

9 REFERENCES IN FILE CA (1907 TO DATE)

9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L75 ANSWER 16 OF 45 MARPAT COPYRIGHT ACS on STN

AN 132:71432 MARPAT Full-text

TI Photothermographic material having desired color

IN Weidner, Charles Harry; Java, Dorothy Theresa; Hershey, Stephen Alan; Priebe, Elizabeth Kizenko

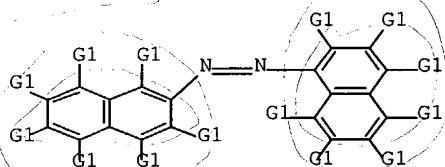
PA Eastman Kodak Company, USA

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 969313	A1	20000105	EP 1999-201884	19990614
EP 969313	B1	20030813		
<b>US 6174657</b>	<b>B1</b>	<b>20010116</b>	<b>US 1998-103596</b>	<b>19980624</b>
JP 2000029164	A2	20000128	JP 1999-176670	19990623

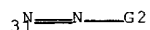
PRAI US 1998-103596 19980624

AB A photothermog. material comprises a support, a photosensitive emulsion layer comprising a binder, a light-insensitive organic silver salt, a reducing agent, and a photosensitive silver halide emulsion, an antihalation dye, and  $\geq 1$  tinting dye such that the final color space of the photothermog. material lies within the range defined by  $220^\circ < \text{hab} < 260^\circ$ , where hab is the psychometric hue angle,  $\text{hab} = \arctan(b^*/a^*)$ , as defined in the CIELAB color system.

MSTR 5



G1 = H / OH / NH2 (SO) / **SO3H** / NO2 / alkoxy (SO) / alkyl (SO) / 31 / R<TX "complex-forming group">



G2 = aryl

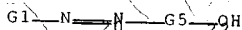
MPL: claim 8

L75 ANSWER 23 OF 45 MARPAT COPYRIGHT ACS on STN  
 AN 124:302743 MARPAT Full-text  
 TI Color filter, its manufacture and liquid crystal display using same  
 IN Sakaeda, Takeshi; Myazaki, Takeshi; Shirota, Katsuhiro  
 PA Canon Kk, Japan  
 SO Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08029772	A2	19960202	JP 1994-164058	19940715
PRAI	JP 1994-164058		19940715		

AB In manufacturing a color filter by ink-jetting an ink on a support to form multiple colored pixels, the ink contains a dye I (Ar = Ph or naphthyl substituted with CH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>3</sub>M, CO<sub>2</sub>M, NHCOCH<sub>3</sub> or Cl, unsubstituted naphthyl; R = SO<sub>3</sub>M, CO<sub>2</sub>M; M = alkaline metal, ammonium, organic ammonium; n = 0-2). Manufacture of the color filter and the liquid crystal display using the color filter are claimed.

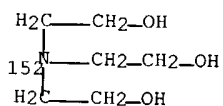
MSTR 1



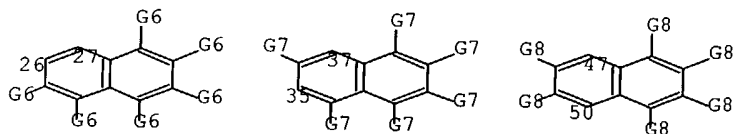
G1 = Ph (SR (1-) G2) / naphthyl (SO (1-) G2)  
 G2 = Me / OMe / 23 / 167 / NHCOMe / Cl

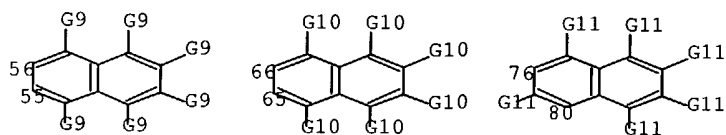


G3 = SO<sub>3</sub>H / CO<sub>2</sub>H  
 G4 = alkali metal atom / NH<sub>3</sub> (SO) / (EX NMe<sub>3</sub> / 152)



G5 = 27-20 26-22 / 37-20 35-22 / 47-20 50-22 /  
 56-20 55-22 / 66-20 65-22 / 76-20 80-22





G6 = (4-) H / 122 / 135

$1\text{G}^3_2 \bullet \text{G}^4$   $1\text{G}^{12}_3 \bullet \text{G}^{13}$

G7 = (4-) H / 124 / 137

$1\text{G}^3_4 \bullet \text{G}^4$   $1\text{G}^{12}_7 \bullet \text{G}^{13}$

G8 = (4-) H / 126 / 139

$1\text{G}^3_6 \bullet \text{G}^4$   $1\text{G}^{12}_9 \bullet \text{G}^{13}$

G9 = (4-) H / 128 / 141

$1\text{G}^3_8 \bullet \text{G}^4$   $1\text{G}^{12}_{11} \bullet \text{G}^{13}$

G10 = (4-) H / 130 / 143

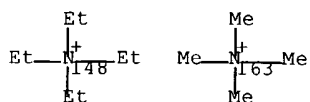
$1\text{G}^3_{10} \bullet \text{G}^4$   $1\text{G}^{12}_{13} \bullet \text{G}^{13}$

G11 = (4-) H / 132 / 145

$1\text{G}^3_{12} \bullet \text{G}^4$   $1\text{G}^{12}_{15} \bullet \text{G}^{13}$

G12 = sulfonate / carboxylate

G13 = R<TX "ammonium"> / (EX 148 / 163)



MPL: claim 1

L75 ANSWER 31 OF 45 MARPAT COPYRIGHT 2004 ACS on STN  
 AN 121:11966 MARPAT  
 TI Azo pigment compositions for solvent- and water-based inks  
 IN Kammer, Joseph  
 PA Hoechst Celanese Corp., USA  
 SO U.S., 9 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5298535	A	19940329	US 1992-956149	19921005
	EP 592907	A1	19940420	EP 1993-115960	19931002
	JP 06220351	A2	19940809	JP 1993-281594	19931005
PRAI	US 1992-956149		19921005		

AB Title compns. comprise mono- or disazo pigments and water-insol. metal salts of water-soluble polymers. Diazotized 2,5-dichloroaniline was coupled with Naphthol AS in an aqueous solution containing Morez 200 (acrylic styrene polymer), stirred with aqueous NaOH solution to a pH of 8-9, stirred with aqueous CaCl<sub>2</sub> solution, heated to 90°, stirred for 30 min, cooled, filtered, washed, dried, and ground to form a product, which was used in preparing aqueous flexog. inks or organic solvent inks and gave prints with good strength and gloss.

## MSTR 1

G1—G22—G2

G1 = 25 / 30 / 79 / 106 / **naphthyl** (SR G12)

G2 = Ph (SO (1-3) G16) / **naphthyl** (SO (1-3) G16)

G6 = Na / Ca / Sr / Ba / Mg / Al / Mn

G21 ● G6  
101

SO<sub>3</sub>H ● G6  
113

G12 = (1) OH / (0-3) G13

G13 = alkyl<(1-4)> / alkoxy<(1-4)> / CO<sub>2</sub>H / 115 / SO<sub>3</sub>H / NO<sub>2</sub> / Cl / Br / I / F / CONH<sub>2</sub> / 119

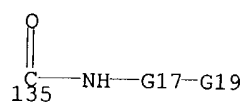
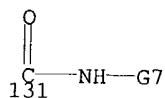
G21 ● G6  
115

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{C} - \text{NH} - \text{G14} \\ 119 \end{array}$$

G16 = alkyl<(1-4)> / alkoxy<(1-4)> / Cl / Br / I / F / NO<sub>2</sub> / **SO<sub>3</sub>H** / 129 / CONH<sub>2</sub> / 131 / 135

8/26/04

129 SO<sub>3</sub>H ● G6



G21 = SO<sub>3</sub>H // CO<sub>2</sub>H

G22 = N=N / 152-1 161-3

**L75 ANSWER 39 OF 45 MARPAT COPYRIGHT ACS on STN**

AN 117:253946 MARPAT Full-text  
 TI Stabilized liquid per salt bleach compositions  
 IN Woods, William G.  
 PA United States Borax and Chemical Corp., USA  
 SO PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2

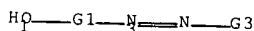
DT Patent  
 LA English

FAN.CNT 1

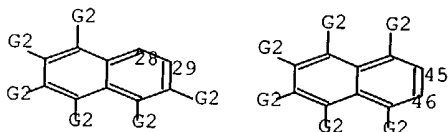
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9207790	A1	19920514	WO 1991-US6322	19910904
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	<b>US 5180517</b>	<b>A</b>	<b>19930119</b>	<b>US 1990-609272</b>	<b>19901105</b>
	CA 2072757	AA	19920506	CA 1991-2072757	19910904
	EP 507917	A1	19921014	EP 1991-919301	19910904
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05502852	T2	19930520	JP 1991-516684	19910904
	JP 2558407	B2	19961127		
	US 5326494	A	19940705	US 1992-953909	19920930
PRAI	US 1990-609272		19901105		
	WO 1991-US6322		19910904		

AB The title compns. are stabilized against loss of active O during storage by adding an azo compound o-(HO)ArN:NR (Ar = Ph, naphthyl, or substituted derivs.; R = Ar or unsatd. heterocyclic group containing C and N). A composition containing Na perborate tetrahydrate 33.33, NaH<sub>2</sub>PO<sub>4</sub>.H<sub>2</sub>O 33.3, water 100, and Erichrome Black T (I) 0.084 g showed active loss during storage at 45° for 14 days 5.1%, vs. 35-45 without I.

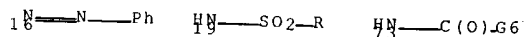
**MSTR 1B**



G1 = 29-1 28-3 / 45-1 46-3

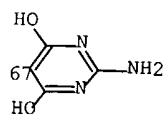


G2 = H / R / (SC NO<sub>2</sub> / NH<sub>2</sub> / loweralkoxy / OH / loweralkyl / X / SO<sub>3</sub>H / 16 / CO<sub>2</sub>H / 73 / 19 / acyl / Hy)



G3 = Ph (SO (1-) G4) / naphthyl (SO (1-) G4) / Hy<EC (1-) Q (1-) N (0) OTHERQ, BD (1-) D> (SO (1-) G4) / (EX 67)





G4 = R / (SC NH2 / NO2 / loweralkyl / OH / 54)

$^{54}\text{SO}_3\text{H}$  • G5

G5 = alkali metal atom

G6 = NH2 / Me

MPL: claim 1

130565

# SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/15/2004

This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date	8-23-04	Serial #	10/657,485	Priority Application Date	9/8/2003
Your Name	Anthony Green			Examiner #	65854
AU	1755	Phone	21367	Room	Rem 9C15
In what format would you like your results? Paper is the default.					
		PAPER	DISK	EMAIL	

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: \_\_\_\_\_

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. \_\_\_\_\_

What types of references would you like? Please checkmark:

Primary Refs \_\_\_\_\_ Nonpatent Literature \_\_\_\_\_ Other \_\_\_\_\_  
 Secondary Refs \_\_\_\_\_ Foreign Patents \_\_\_\_\_  
 Teaching Refs \_\_\_\_\_

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Azo dye  
 structure  
 attached

## Staff Use Only

Searcher: HARRISON  
 Searcher Phone: 22511  
 Searcher Location: STIC-EIC2800, JEF-4B68  
 Date Searcher Picked Up: 8-25  
 Date Completed: 8-26  
 Searcher Prep/Rev Time: 100  
 Online Time: 70

## Type of Search

Structure (#) 1  
 Bibliographic X  
 Litigation \_\_\_\_\_  
 Fulltext \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors

STN X  
 Dialog \_\_\_\_\_  
 Questel/Orbita \_\_\_\_\_  
 Lexis-Nexis \_\_\_\_\_  
 WWW/Internet X  
 Other \_\_\_\_\_